

DEPARTMENT OF THE INTERIOR

Fish and Wildlife Service

50 CFR Part 17

[Docket No. FWS-R2-ES-2022-0156; FF09E21000 FXES1111090FEDR 234]

RIN 1018-BF85

Endangered and Threatened Wildlife and Plants; Endangered Species Status for

Navasota False Foxglove and Designation of Critical Habitat

AGENCY: Fish and Wildlife Service, Interior.

ACTION: Proposed rule.

SUMMARY: We, the U.S. Fish and Wildlife Service (Service), propose to list Navasota false foxglove (*Agalinis navasotensis*), a plant species from Grimes and Tyler Counties, Texas, as an endangered species under the Endangered Species Act of 1973, as amended (Act). This determination also serves as our 12-month finding on a petition to list Navasota false foxglove. After a review of the best available scientific and commercial information, we find that listing the species is warranted. We also propose to designate critical habitat for Navasota false foxglove under the Act. In total, approximately 1.9 acres (0.8 hectares) in Grimes and Tyler Counties, Texas, fall within the boundaries of the proposed critical habitat designation. In addition, we announce the availability of a draft economic analysis of the proposed designation of critical habitat for Navasota false foxglove. If we finalize this rule as proposed, it would add this species to the List of Endangered and Threatened Plants and extend the Act's protections to the species and its designated critical habitat.

DATES: We will accept comments received or postmarked on or before [INSERT DATE 60 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER]. Comments submitted electronically using the Federal eRulemaking Portal (see

ADDRESSES, below) must be received by 11:59 p.m. eastern time on the closing date. We must receive requests for a public hearing, in writing, at the address shown in **FOR FURTHER INFORMATION CONTACT** by [INSERT DATE 45 DAYS AFTER

DATE OF PUBLICATION IN THE FEDERAL REGISTER].

ADDRESSES: You may submit comments by one of the following methods:

- (1) Electronically: Go to the Federal eRulemaking Portal:

 https://www.regulations.gov. In the Search box, enter FWS-R2-ES-2022-0156, which is the docket number for this rulemaking. Then, click on the Search button. On the resulting page, in the panel on the left side of the screen, under the Document Type heading, check the Proposed Rule box to locate this document. You may submit a comment by clicking on "Comment."
- (2) *By hard copy*: Submit by U.S. mail to: Public Comments Processing, Attn: FWS-R2-ES-2022-0156, U.S. Fish and Wildlife Service, MS: PRB/3W, 5275 Leesburg Pike, Falls Church, VA 22041–3803.

We request that you send comments only by the methods described above. We will post all comments on https://www.regulations.gov. This generally means that we will post any personal information you provide us (see Information Requested, below, for more information).

Availability of supporting materials: Supporting materials, such as the species status assessment report, are available at https://fws.gov/species/navasota-false-foxglove-agalinis-navasotensis, and https://www.regulations.gov at Docket No. FWS-R2-ES-2022-0156, or both. For the critical habitat designation, the coordinates or plot points or both from which the maps are generated are included in the decision file for this critical habitat designation and are available at https://www.regulations.gov at Docket No. FWS-R2-ES-2022-0156 and on the Service's website at https://fws.gov/species/navasota-false-foxglove-agalinis-navasotensis.

FOR FURTHER INFORMATION CONTACT: Chuck Ardizzone, Project Leader, Texas Coastal Ecological Services Field Office, U.S. Fish and Wildlife Service, 17629 El Camino Real, Ste 211, Houston, TX 77058; telephone: (281) 286–8282. Individuals in the United States who are deaf, deafblind, hard of hearing, or have a speech disability may dial 711 (TTY, TDD, or TeleBraille) to access telecommunications relay services. Individuals outside the United States should use the relay services offered within their country to make international calls to the point-of-contact in the United States.

SUPPLEMENTARY INFORMATION:

Executive Summary

Why we need to publish a rule. Under the Act, a species warrants listing if it meets the definition of an endangered species (in danger of extinction throughout all or a significant portion of its range) or a threatened species (likely to become endangered within the foreseeable future throughout all or a significant portion of its range). If we determine that a species warrants listing, we must list the species promptly and designate the species' critical habitat to the maximum extent prudent and determinable. We have determined that the Navasota false foxglove meets the definition of an endangered species; therefore, we are proposing to list it as such and proposing a designation of its critical habitat. Both listing a species as an endangered or threatened species and designating critical habitat can be completed only by issuing a rule through the Administrative Procedure Act rulemaking process (5 U.S.C. 551 et seq.).

What this document does. We propose to list the Navasota false foxglove as an endangered species under the Act, and we propose the designation of critical habitat for the species.

The basis for our action. Under the Act, we may determine that a species is an endangered or threatened species because of any of five factors: (A) The present or threatened destruction, modification, or curtailment of its habitat or range; (B)

overutilization for commercial, recreational, scientific, or educational purposes; (C) disease or predation; (D) the inadequacy of existing regulatory mechanisms; or (E) other natural or manmade factors affecting its continued existence. We have determined that the Navasota false foxglove is endangered due to the following threats: the encroachment of woody vegetation (Factor A) and the demographic consequences of few (three) small populations (Factor E). Land use changes (Factor A), consequences from global climate change (Factors A and E), and the cumulative impacts from all of the above-mentioned influences are also impacting the species' status.

Section 4(a)(3) of the Act requires the Secretary of the Interior (Secretary) to designate critical habitat concurrent with listing to the maximum extent prudent and determinable. Section 3(5)(A) of the Act defines critical habitat as (i) the specific areas within the geographical area occupied by the species, at the time it is listed, on which are found those physical or biological features (I) essential to the conservation of the species and (II) which may require special management considerations or protection; and (ii) specific areas outside the geographical area occupied by the species at the time it is listed, upon a determination by the Secretary that such areas are essential for the conservation of the species. Section 4(b)(2) of the Act states that the Secretary must make the designation on the basis of the best scientific data available and after taking into consideration the economic impact, the impact on national security, and any other relevant impacts of specifying any particular area as critical habitat.

Information Requested

We intend that any final action resulting from this proposed rule will be based on the best scientific and commercial data available and be as accurate and as effective as possible. Therefore, we request comments or information from other governmental agencies, Native American Tribes, the scientific community, industry, or any other interested parties concerning this proposed rule.

We particularly seek comments concerning:

- (1) The species' biology, range, and population trends, including:
- (a) Biological or ecological requirements of the species, including habitat requirements;
 - (b) Genetics and taxonomy;
- (c) Historical and current range, including distribution patterns, including the locations of any additional populations of this species;
 - (d) Historical and current population levels, and current and projected trends; and
 - (e) Past and ongoing conservation measures for the species, its habitat, or both.
 - (2) Threats and conservation actions affecting the species, including:
- (a) Factors that may be affecting the continued existence of the species, which may include habitat modification or destruction, overutilization, disease, predation, the inadequacy of existing regulatory mechanisms, or other natural or manmade factors.
- (b) Biological, commercial trade, or other relevant data concerning any threats (or lack thereof) to this species.
- (c) Existing regulations or conservation actions that may be addressing threats to this species.
- (3) Additional information concerning the historical and current status of this species.
 - (4) Specific information on:
 - (a) The amount and distribution of Navasota false foxglove habitat;
- (b) Any additional areas occurring within the range of the species, in Grimes and Tyler Counties, Texas, that should be included in the designation because they (i) are occupied at the time of listing and contain the physical or biological features that are essential to the conservation of the species and that may require special management

considerations, or (ii) are unoccupied at the time of listing and are essential for the conservation of the species; and

- (c) Special management considerations or protection that may be needed in critical habitat areas we are proposing, including managing for the potential effects of climate change; and
- (d) Whether occupied areas are adequate for the conservation of the species, as this will help us evaluate the potential to include areas not occupied at the time of listing. Additionally, please provide specific information regarding whether or not unoccupied areas would, with reasonable certainty, contribute to the conservation of the species and contain at least one physical or biological feature essential to the conservation of the species. We also seek comments or information regarding whether areas not occupied at the time of listing qualify as habitat for the species.
- (7) Land use designations and current or planned activities in the subject areas and their possible impacts on proposed critical habitat.
- (8) Additional information regarding land ownership within the proposed critical habitat units
- (9) Any probable economic, national security, or other relevant impacts of designating any area that may be included in the final designation, and the related benefits of including or excluding specific areas.
- (10) Information on the extent to which the description of probable economic impacts in the draft economic analysis is a reasonable estimate of the likely economic impacts and any additional information regarding probable economic impacts that we should consider.
- (11) Whether any specific areas we are proposing for critical habitat designation should be considered for exclusion under section 4(b)(2) of the Act, and whether the benefits of potentially excluding any specific area outweigh the benefits of including that

area under section 4(b)(2) of the Act. If you think we should exclude any additional areas, please provide information supporting a benefit of exclusion.

(12) Whether we could improve or modify our approach to designating critical habitat in any way to provide for greater public participation and understanding, or to better accommodate public concerns and comments.

Please include sufficient information with your submission (such as scientific journal articles or other publications) to allow us to verify any scientific or commercial information you include.

Please note that submissions merely stating support for, or opposition to, the action under consideration without providing supporting information, although noted, do not provide substantial information necessary to support a determination. Section 4(b)(1)(A) of the Act directs that determinations as to whether any species is an endangered or a threatened species must be made solely on the basis of the best scientific and commercial data available, and section 4(b)(2) of the Act directs that the Secretary shall designate critical habitat on the basis of the best scientific information available.

You may submit your comments and materials concerning this proposed rule by one of the methods listed in **ADDRESSES**. We request that you send comments only by the methods described in **ADDRESSES**.

If you submit information via https://www.regulations.gov, your entire submission—including any personal identifying information—will be posted on the website. If your submission is made via a hardcopy that includes personal identifying information, you may request at the top of your document that we withhold this information from public review. However, we cannot guarantee that we will be able to do so. We will post all hardcopy submissions on https://www.regulations.gov.

Comments and materials we receive, as well as supporting documentation we used in preparing this proposed rule, will be available for public inspection on https://www.regulations.gov.

Our final determination may differ from this proposal because we will consider all comments we receive during the comment period as well as any information that may become available after this proposal. Based on the new information we receive (and any comments on that new information), we may conclude that the species is threatened instead of endangered, or we may conclude that the species does not warrant listing as either an endangered species or a threatened species. For critical habitat, our final designation may not include all areas proposed, may include some additional areas that meet the definition of critical habitat, or may exclude some areas if we find the benefits of exclusion outweigh the benefits of inclusion and exclusion will not result in the extinction of the species. In our final rule, we will clearly explain our rationale and the basis for our final decision, including why we made changes, if any, that differ from this proposal.

Public Hearing

Section 4(b)(5) of the Act provides for a public hearing on this proposal, if requested. Requests must be received by the date specified in **DATES**. Such requests must be sent to the address shown in **FOR FURTHER INFORMATION CONTACT**. We will schedule a public hearing on this proposal, if requested, and announce the date, time, and place of the hearing, as well as how to obtain reasonable accommodations, in the *Federal Register* and local newspapers at least 15 days before the hearing. We may hold the public hearing in person or virtually via webinar. We will announce any public hearing on our website, in addition to announcing them in the *Federal Register*. The use of virtual public hearings is consistent with our regulations at 50 CFR 424.16(c)(3).

Previous Federal Actions

On June 25, 2007, we received a petition to list 475 species, including Navasota false foxglove, from Forest Guardians (now WildEarth Guardians). On December 16, 2009, we published a 90-day finding for 192 of those species, including the Navasota false foxglove (74 FR 66866). We found that there was substantial information indicating that listing the species may be warranted. The Navasota false foxglove was added to our national listing workplan with a target completion date of fiscal year 2023 for the 12-month finding. We completed a species status assessment for the species in 2022.

Peer Review

A species status assessment (SSA) team prepared an SSA report for the Navasota false foxglove. The SSA team was composed of Service biologists, in consultation with other species experts. The SSA report represents a compilation of the best scientific and commercial data available concerning the status of the species, including the impacts of past, present, and future factors (both negative and beneficial) affecting the species.

In accordance with our joint policy on peer review published in the *Federal Register* on July 1, 1994 (59 FR 34270), and our August 22, 2016, memorandum updating and clarifying the role of peer review of listing actions under the Act, we solicited independent scientific review of the information contained in the Navasota false foxglove SSA report. We sent the SSA report to eight independent peer reviewers, including scientists, botanists, and consultants with a variety of expertise in rare plants, conservation and restoration, and fire management. We received review from two peer reviewers. Results of this structured peer review process can be found at https://regulations.gov under Docket No. FWS-R2-ES-2022-0156. In preparing this proposed rule, we incorporated the results of these reviews, as appropriate, into the SSA report, which is the foundation for this proposed rule.

Summary of Peer Reviewer Comments

As discussed in **Peer Review**, above, we received comments from two peer reviewers on the draft SSA report. We reviewed all comments we received from the peer reviewers for substantive issues and new information regarding the information contained in the SSA report. The peer reviewers generally concurred with our methods and conclusions, and provided additional information, clarifications in terminology and discussions of genetic diversity, and other editorial suggestions.

I. Proposed Listing Determination

Background

Agalinis (false foxglove) is a genus of about 70 species in North, Central, and South America that until 2008 was aligned with members of the family Scrophulariaceae (figwort). In 2008, it was shown to be more closely related to Orobanchaceae (broomrape), which consists mostly of hemiparasitic plants (plants that obtain part of their food by parasitism; Pettengill and Neel 2008, p. 15).

Navasota false foxglove is a narrowly endemic, hemiparasitic, annual plant known from only two counties in southeast Texas (Grimes and Tyler Counties). Navasota false foxglove flowering begins in mid-September and is triggered by short days when there are fewer hours of sunlight (Reed et al. 2005, p. 7). Navasota false foxglove blooms from mid-September to October, and seeds mature from October to early November. Fruit maturation and seed dispersal occurs by November; other *Agalinis* fruit typically contains between 50 and 180 seeds (Cunningham and Parr 1990, p. 269). Plants are usually dead by December. This species is relatively hard to see when the plants are not in flower, and even during flowering times they can be hard to see across the landscape. They bloom every day in fall months, and flowers often drop by mid-afternoon of the same day. Navasota false foxglove require full sunlight and will not grow in solid stands of very dense vegetation (Strong and Williamson 2015, p. 6). The species occurs on

rocky outcrops with well drained, shallow soils that have historically been ungrazed and unplowed.

Navasota false foxglove is an annual herb from a few fibrous roots, 11-36 inches (2.7-9.1 decimeters) tall, often tinged with purple, maroon, or bronze. The blooms are often purplish-pink in color. The leaves and general appearance of Navasota false foxglove resemble several other common false foxgloves that all have thin, thread-like leaves (Canne-Hilliker and Dubrule 1993, pp. 426–431).

Navasota false foxglove is hemiparasitic (a plant that possesses chlorophyll and typically carries out photosynthesis but is partially parasitic on the roots or shoots of a plant host), and little bluestem (*Schizachyrium scoparium*) is hypothesized to be one of the main plants that it parasitizes (Reed 2019 pers. comm.). Host plants provided needed nutrients for survival and reproduction of Navasota false foxglove, especially in drought years.

Navasota false foxglove is found in three populations in two counties in Texas and is most similar to Caddo false foxglove (*Agalinis caddoensis*), a species presumed extinct from Louisiana. The status of Navasota false foxglove as a distinct species was supported by DNA barcoding research (Pettengill and Neel 2010, entire), but the distinction and population genetics between the current sites in Grimes and Tyler Counties, Texas, have not been analyzed. The Grimes County and Tyler County populations are separated by more than 100 miles.

Land use has remained consistent since the populations were found. The private landowners have allowed the Service and other individuals from Texas A&M University to visit their property for surveys and implementing habitat management projects.

Regulatory and Analytical Framework

Regulatory Framework

Section 4 of the Act (16 U.S.C. 1533) and the implementing regulations in title 50 of the Code of Federal Regulations set forth the procedures for determining whether a species is an endangered species or a threatened species, issuing protective regulations for threatened species, and designating critical habitat for endangered and threatened species. In 2019, jointly with the National Marine Fisheries Service, the Service issued a final rule that revised the regulations in 50 CFR part 424 regarding how we add, remove, and reclassify endangered and threatened species and the criteria for designating listed species' critical habitat (84 FR 45020; August 27, 2019). On the same day, the Service also issued final regulations that, for species listed as threatened species after September 26, 2019, eliminated the Service's general protective regulations automatically applying to threatened species the prohibitions that section 9 of the Act applies to endangered species (84 FR 44753; August 27, 2019).

The Act defines an "endangered species" as a species that is in danger of extinction throughout all or a significant portion of its range, and a "threatened species" as a species that is likely to become an endangered species within the foreseeable future throughout all or a significant portion of its range. The Act requires that we determine whether any species is an endangered species or a threatened species because of any of the following factors:

- (A) The present or threatened destruction, modification, or curtailment of its habitat or range;
- (B) Overutilization for commercial, recreational, scientific, or educational purposes;
 - (C) Disease or predation;
 - (D) The inadequacy of existing regulatory mechanisms; or

(E) Other natural or manmade factors affecting its continued existence.

These factors represent broad categories of natural or human-caused actions or conditions that could have an effect on a species' continued existence. In evaluating these actions and conditions, we look for those that may have a negative effect on individuals of the species, as well as other actions or conditions that may ameliorate any negative effects or may have positive effects.

We use the term "threat" to refer in general to actions or conditions that are known to or are reasonably likely to negatively affect individuals of a species. The term "threat" includes actions or conditions that have a direct impact on individuals (direct impacts), as well as those that affect individuals through alteration of their habitat or required resources (stressors). The term "threat" may encompass—either together or separately—the source of the action or condition or the action or condition itself.

However, the mere identification of any threat(s) does not necessarily mean that the species meets the statutory definition of an "endangered species" or a "threatened species." In determining whether a species meets either definition, we must evaluate all identified threats by considering the species' expected response and the effects of the threats—in light of those actions and conditions that will ameliorate the threats—on an individual, population, and species level. We evaluate each threat and its expected effects on the species, then analyze the cumulative effect of all of the threats on the species as a whole. We also consider the cumulative effect of the threats in light of those actions and conditions that will have positive effects on the species, such as any existing regulatory mechanisms or conservation efforts. The Secretary determines whether the species meets the definition of an "endangered species" or a "threatened species" only after conducting this cumulative analysis and describing the expected effect on the species now and in the foreseeable future.

The Act does not define the term "foreseeable future," which appears in the statutory definition of "threatened species." Our implementing regulations at 50 CFR 424.11(d) set forth a framework for evaluating the foreseeable future on a case-by-case basis. The term "foreseeable future" extends only so far into the future as we can reasonably determine that both the future threats and the species' responses to those threats are likely. In other words, the foreseeable future is the period of time in which we can make reliable predictions. "Reliable" does not mean "certain"; it means sufficient to provide a reasonable degree of confidence in the prediction. Thus, a prediction is reliable if it is reasonable to depend on it when making decisions.

It is not always possible or necessary to define foreseeable future as a particular number of years. Analysis of the foreseeable future uses the best scientific and commercial data available and should consider the timeframes applicable to the relevant threats and to the species' likely responses to those threats in view of its life-history characteristics. Data that are typically relevant to assessing the species' biological response include species-specific factors such as lifespan, reproductive rates or productivity, certain behaviors, and other demographic factors.

Analytical Framework

The SSA report documents the results of our comprehensive biological review of the best scientific and commercial data regarding the status of the species, including an assessment of the potential threats to the species. The SSA report does not represent our decision on whether the species should be proposed for listing as an endangered or threatened species under the Act. However, it does provide the scientific basis that informs our regulatory decisions, which involve the further application of standards within the Act and its implementing regulations and policies.

To assess Navasota false foxglove viability, we used the three conservation biology principles of resiliency, redundancy, and representation (Shaffer and Stein 2000,

pp. 306–310). Briefly, resiliency is the ability of the species to withstand environmental and demographic stochasticity (for example, wet or dry, warm or cold years), redundancy is the ability of the species to withstand catastrophic events (for example, droughts, large pollution events), and representation is the ability of the species to adapt over time to long-term changes in the environment (for example, climate conditions, pathogens). In general, species viability will increase with increases in resiliency, redundancy, and representation (Smith et al. 2018, p. 306). Using these principles, we identified the species' ecological requirements for survival and reproduction at the individual, population, and species levels, and described the beneficial and risk factors influencing the species' viability.

The SSA process can be categorized into three sequential stages. During the first stage, we evaluated the individual species' life-history needs. The next stage involved an assessment of the historical and current condition of the species' demographics and habitat characteristics, including an explanation of how the species arrived at its current condition. The final stage of the SSA involved making predictions about the species' responses to positive and negative environmental and anthropogenic influences.

Throughout all of these stages, we used the best available information to characterize viability as the ability of a species to sustain populations in the wild over time. We use this information to inform our regulatory decision.

The following is a summary of the key results and conclusions from the SSA report; the full SSA report can be found at Docket No. FWS-R2-ES-2022-0156 on https://www.regulations.gov and at https://www.regulations.gov and at https://www.fws.gov/office/texas-coastal-ecological-services.

Summary of Biological Status and Threats

In this discussion, we review the biological condition of the species and its resources, and the threats that influence the species' current and future condition, in order to assess the species' overall viability and the risks to that viability.

We evaluated the individual needs of Navasota false foxglove in terms of the resource needs and/or the circumstances that are necessary to complete each stage of the life cycle. The life history of Navasota false foxglove is closely tied to its specific habitat requirements for all stages of the species' life cycle. Table 1 summarizes the resources that are needed by life stage. For further information about any particular life stage or resource need, see chapter 2 of the SSA report (Service 2022, pp. 8 – 24).

Table 1. Resource Needs by Life Stage.

Life stage	Resources and/or circumstances needed for individuals to complete each life stage	Resource function	References
Seeds	5 5	Habitat Nutrition Seed dispersal	Strong and Williamson 2015, pp. 5, 9; Canne- Hilliker & Dubrule 1993, p. 433
Germination		Habitat Nutrition	Strong and Williamson 2015, pp. 5, 9; Canne-Hilliker & Dubrule 1993, p. 433; Yatskievych 2021, pers comm.

Seedlings	 Calcareous, shallow, sandy to clay loam soils that are ungrazed and unplowed. Limited woody encroachment; open prairie habitat. Full sun. Annual precipitation events that provide enough soil moisture for germination. 	Habitat Nutrition	Strong and Williamson 2015, pp. 5, 8, 9; Canne- Hilliker & Dubrule 1993, p. 433.
Mature and reproductive adults	 Short sun hour days to trigger flowering. Full sun exposure; can maintain with shade up to 10–15%. Pollinators. Host plant for resources Sparse surrounding vegetation (adversely affected if surrounding vegetation is too thick). Calcareous, shallow, sandy to clay loam soils that are ungrazed and unplowed. Limited woody encroachment; open prairie habitat. Annual precipitation events that provide enough soil moisture for germination. 	Habitat Nutrition Reproduction	Strong and Williamson 2015, pp. 5, 9; Canne-Hilliker & Dubrule 1993, p. 433; Reed 2021, pers. comm.
Fruit/capsule	 Pollination (selfing or pollinators) Host plant for resources Calcareous, shallow, sandy to clay loam soils that are ungrazed and unplowed. Limited woody encroachment; open prairie habitat. Full sun. Annual precipitation events that provide enough soil moisture for germination. 	Habitat Nutrition Reproduction	Canne-Hilliker & Dubrule 1993, p. 433; Strong and Williamson 2015, pp. 5, 9.

We identify the species' needs in terms of redundancy and representation of the species. We evaluate the redundancy of this species by the number and distribution of Navasota false foxglove populations. Having multiple populations distributed across a larger area reduces the risk of catastrophic events that may affect one or more populations simultaneously, affecting the whole species. Fewer populations distributed narrowly across the species' range would increase catastrophic risk and lower redundancy.

Representation of Navasota false foxglove is based on the presence of multiple, self-sustaining populations across the range of the species and their contributions to providing adaptive capacity to the species in the face of changing conditions. Navasota false foxglove requires a level of genetic diversity that enables the species to adapt to environmental change. We do not know if there is occupied habitat elsewhere within Grimes County, Tyler County, or other areas of Texas. Therefore, we do not know how many populations are necessary to provide sufficient redundancy and representation to the species.

Stressors Affecting Navasota False Foxglove and Its Habitat

Encroachment of Woody Vegetation

Navasota false foxglove thrives in full sun along with its assumed host plant, little bluestem. This species thrives in full sun and on outcrops that are described as distinct islands surrounded by a sea of Post Oak Savannah (Canne-Hilliker and Dubrule 1993). Woody vegetation shades out areas of habitat that have previously provided full sun, inhibiting plant growth. Woody vegetation from surrounding savannahs, if not controlled, will invade these distinct islands of outcrops and reduce full sun conditions, which Navasota false foxglove needs to survive. Management, including prescribed fires, can prevent the invasion of woody vegetation and stimulate root growth of the host plant. Woody vegetation control has occurred in element occurrence (EO) 6674 (East), through both prescribed fires and mechanical removal; subsequent surveys revealed much higher numbers of individuals. Habitat improvements and prescribed fires have only occurred within EO 6674 (East), although woody vegetation occurs at the other two populations as well.

Disturbance

Navasota false foxglove has adapted to different types of disturbance including land clearing, road improvements, grazing, vegetation removal, and prescribed fire.

Some disturbance types are beneficial; after a prescribed fire, the number of individuals the following survey year had more than doubled, indicating this species may be fire dependent. Although Navasota false foxglove may be able to persist through different types of disturbances, the species occurs in areas that are historically ungrazed and unplowed, indicating it is not tolerant of land use changes.

All three Navasota false foxglove populations are near developed roads or areas used for harvesting timber, areas that are vulnerable to actions such as road construction, grading, and other ground-moving activities. Grazing, another type of disturbance, has occurred on the Grimes West population of Navasota false foxglove, where evidence of hoof prints and livestock waste were observed. Individual livestock have not been present during visits to this site. While several individuals of Navasota false foxglove have been observed in these areas, trampling could occur, but because livestock grazing is limited and we know of no plans for it to increase, it likely does not pose a current threat to the species.

Climate Change and Drought

Climate change has already begun, and continued greenhouse gas emissions at or above current rates will cause further warming (Intergovernmental Panel on Climate Change (IPCC) 2013, pp. 11–12). Warming in the Southwest is expected to be greatest in the summer, and annual mean precipitation is very likely to decrease in the Southwest (IPCC 2013, pp. 11–12). In Texas, the number of extreme hot days (high temperatures exceeding 95 degrees Fahrenheit (°F)) are expected to double by around 2050 (Kinniburgh et al. 2015, p. 83).

The Fifth Assessment Report of the IPCC (2013, p. 23) projects the following changes by the end of the 21st century, relative to the 1986 to 2005 averages:

 It is virtually certain that most land areas will experience warmer and/or fewer cold days and nights;

- It is virtually certain that most land areas will experience warmer and/or more frequent hot days and nights;
- It is very likely that the frequency and/or duration of warm spells and heat waves will increase in most land areas;
- It is very likely that the frequency, intensity, and/or amount of heavy precipitation events will increase in mid-latitude land masses; and
- It is likely that the intensity and/or duration of droughts will increase on a regional to global scale.

Representative concentration pathways (RCPs) provide a framework for modelling in the next stages of scenario-based research for greenhouse gas emissions. These are plausible pathways toward reaching each target of time-evolving emissions or concentrations of radiatively active constituents (Moss et al. 2010, p. 752). RCPs provide scenarios that include time series of emissions and concentrations of greenhouse gases, aerosols, and chemically active gases. Within the term "representative concentration pathway," the word "representative" signifies that each RCP provides only one of many possible scenarios that would lead to the specific radiative-forcing characteristics. The word "pathway" emphasizes that not only are the long-term concentration levels something to consider, but the possible outcomes of these trajectories over time (Moss et al. 2010, p. 752). RCP models provide one of many possible scenarios for future conditions based on specific radiative-forcing characteristics, for example, change in the concentration of carbon dioxide or the output of the sun. Two RCP scenarios were used in the SSA. One pathway was evaluated at RCP 4.5, where the radiative forces are stabilized at 4.5 watts per square meter by year 2100 and concentrations are constant after year 2150. The second pathway evaluated was RCP 8.5, where the radiative forces are greater than 8.5 watts per square meter by year 2100 and continue to rise.

Depending on timing and intensity of drought events, Navasota false foxglove could be adversely affected by increased mortality rates, reduced reproductive output due to loss or reduced vigor of mature plants, and reduced rates of seed germination and seedling recruitment. Increases in soil temperatures and soil moisture evaporation in response to predicted ambient warming could increase rates of soil seed bank depletion by increasing seedling mortality rates (Ooi 2012, pp. S54–S55) and diminish the resilience of Navasota false foxglove populations by reducing the species' ability to maintain soil seed banks. While climate has changed in recent decades in regions where the Navasota false foxglove occurs, the rate of change likely will continue to increase into the future.

The species retains the ability to rebound after drought, likely due to the seed bank responding to rewetted conditions. Reviewing the survey data from extreme drought years in Texas (i.e. 2011, the driest year on record), abundance increased the year after the drought ended. Species specialists hypothesize that the seed bank provides resiliency by allowing the species to be dormant through dry years and then germinating in years when conditions are suitable. We do not have information regarding how long or how intense of a drought the species can withstand.

Conservation Efforts and Regulatory Mechanisms

Of the three source features for Navasota false foxglove, all three EOs occur entirely on privately owned land. The owners of the land where the EO 6674 (East) population occurs protect the habitat for conservation purposes and voluntarily allow researchers and scientists on their property to conduct surveys. Employees of the Texas Parks and Wildlife Department and the Service, as well as researchers from Texas A&M University, have visited the EO 6674 (West) population several times. This population is not currently being managed for Navasota false foxglove, but it has new electric fencing to restrict cattle (as noted during the fall 2020 site visit). The EO 9000 source feature is

currently owned by a timber company and has not been visited by biologists in several years. The habitat descriptions and locations of some other plant species specimens report the presence of Navasota false foxglove, but these locations have not been verified nor surveyed for Navasota false foxglove by specialists at this time.

Current Condition

It is very difficult to determine the population sizes and demographic trends of an annual plant with wide annual variation in the numbers of individuals that germinate from the seed bank, flower, and set seed. In the case of EOs that have multiple source features, seed germination pulses may not be synchronous at all source features; as the maximum numbers observed at different areas may occur in different years, the potential population size may be much greater than the numbers observed in an entire EO in any single year. However, the annual survey results for each EO represent the best available data from which to assess population size, and regardless of year-to-year variation, these populations are not large and occupy very small areas. Small, isolated populations are more vulnerable to catastrophic losses caused by random fluctuations in recruitment (demographic stochasticity) or variations in rainfall or other environmental factors (environmental stochasticity) (USFWS 2016, p. 20). Because these populations occur over such small areas, any event that affects a population is expected to affect the entire population, possibly resulting in extirpation. In addition to population size, it is likely that population density also influences resiliency, since reproduction requires genetically compatible individuals to be clustered within the forage ranges of the species' pollinators.

Population resiliency for the current condition of Navasota false foxglove was derived from two habitat factors (host plant availability, open canopy) and two demographic factors (population size and connectivity). To rank these four factors, we described conditions that were assumed to contribute to "high," "moderate," "low," or

"very low" levels of population resilience and provided each with a quantified rank of 3, 2, 1, or 0, respectively (see table 2, below). See chapter 4 of the SSA report for a full description of each factor (Service 2022, p. 27-32).

Table 2. Current Condition Categories.

	Habitat Factors		Demographic Factors		
Condition	Host Plant	Open Canopy (%	Population	Population	
Category	Availability	of sun exposure)	Size	Connectivity	
High (3)	Habitat supports	≥ 75% open	≥ 1,667	Population located	
	LBS ¹ , and the	habitat	individuals	within 0–0.25 km of	
	plant occurs			another occupied site	
	throughout the				
	occupied area				
Moderate (2)	LBS occurs in	50–75% open	834–1,667	Population located	
	some of the	habitat	individuals	between 0.25 and 0.5	
	occupied area			km from another	
				occupied site	
Low (1)	LBS has a low	25–50% open	≤ 834	Population located	
	occurrence in the	habitat	individuals	between 0.5 and 1 km	
	occupied area			from another occupied	
				site	
Very Low (0)	LBS does not	≤ 25% open	0 individuals	Population located > 1	
	occur in the	habitat		km from another	
	occupied area			occupied site	

¹ LBS stands for little bluestem (*Schizachyrium scoparium*)

The available survey data for Navasota false foxglove are limited to "presence/absence," and where population estimates are provided, the data are infrequent and generally incomparable because survey methodologies were not documented and changed over time. Therefore, we cannot determine if Navasota false foxglove population numbers are changing over time across the source features. In the absence of current survey data for some populations (EO 9000), it was assumed that if a historically known population site maintains habitat conditions conducive to the species, the population is presumed extant. Therefore, the current condition of the species may be overestimated.

The conservation principles of resiliency, redundancy, and representation were used to summarize the current condition site scores for Navasota false foxglove (see table

3, below). The resiliency of each source feature was based on the survey data and condition of the individual source features. Specifically, the site scores for the extant populations within each source feature considered the total number and size of extant populations in each area (i.e., redundancy within the source feature), and other factors such as observed population size, specific local stressors, and available survey data. The species' redundancy and representation were assessed based on the distribution of the species. As mentioned above, there can be some uncertainty in population size of these source features. Our assessment of the species' needs determined that populations with fewer than 834 individuals are considered to have low resiliency (Table 2). Based on our survey results from the largest unit (Unit 1: EO 6674 (East)), there has not been a survey year with more than 834 individuals since the early 2000s. All three populations were ranked as a low for population size due to several years in a row of surveys with fewer than 834 individuals in all populations at each survey year. Additionally, canopy conditions and connectivity are moderate or low in all populations. Results of the current condition analysis indicate that none of the populations are in high condition, one is in moderate condition, and two are in low condition.

Table 3. Current Condition Site Scores.

Location (EO)	Habitat Factors		Demographic Factors		Final
	Host Plant	Canopy Openness	Population	Population	Site
	Availability	(sun exposure)	Size	Connectivity	Score
EO 6674	High	Moderate	Low	Moderate	Moderate
(East)					
EO 6674	Low	Moderate	Low	Moderate	Low
(West)					
EO 9000	Low	Moderate	Low	Very Low	Low

Future Conditions

As part of the SSA, we also developed two future condition scenarios to capture the range of uncertainties regarding future threats and the projected responses by the Navasota false foxglove. Our scenarios assumed two different climate model scenarios

and similar or increasing effects from the influences on species viability into the future. Because we determined that the current condition of the Navasota false foxglove is consistent with an endangered species (see **Determination of Navasota False**Foxglove's Status, below), we are not presenting the results of the future scenarios in this proposed rule. Please refer to the SSA report (Service 2022, p. 32-34) for the full analysis of future scenarios.

We note that, by using the SSA framework to guide our analysis of the scientific information documented in the SSA report, we have analyzed the cumulative effects of identified threats and conservation actions on the species. To assess the current and future condition of the species, we evaluate the effects of all the relevant factors that may be influencing the species, including threats and conservation efforts. Because the SSA framework considers not just the presence of the factors, but to what degree they collectively influence risk to the entire species, our assessment integrates the cumulative effects of the factors and replaces a standalone cumulative-effects analysis.

Determination of Navasota False Foxglove's Status

Section 4 of the Act (16 U.S.C. 1533) and its implementing regulations (50 CFR part 424) set forth the procedures for determining whether a species meets the definition of an endangered species or a threatened species. The Act defines an "endangered species" as a species in danger of extinction throughout all or a significant portion of its range, and a "threatened species" as a species likely to become an endangered species within the foreseeable future throughout all or a significant portion of its range. The Act requires that we determine whether a species meets the definition of an endangered species or a threatened species because of any of the following factors: (A) The present or threatened destruction, modification, or curtailment of its habitat or range; (B) overutilization for commercial, recreational, scientific, or educational purposes; (C)

disease or predation; (D) the inadequacy of existing regulatory mechanisms; or (E) other natural or manmade factors affecting its continued existence.

Status Throughout All of Its Range

After evaluating threats to the species and assessing the cumulative effect of the threats under the Act's section 4(a)(1) factors, we determined that encroachment of woody vegetation (Factor A), disturbance (Factor A), consequences from climate change (Factors A and E), and the cumulative impacts from all of the above-mentioned influences are threats to the Navasota false foxglove's continued existence. Two of the three extant populations have low resiliency, which makes them much less likely to be able to withstand stochastic events such as drought and disturbance. The third population has moderate resiliency.

A narrow endemic, Navasota false foxglove has little redundancy and no adaptive capacity (representation), as it has few populations and is inherently at a higher risk of extinction. Simply being a narrow endemic does not, in and of itself, mean the species is in danger of extinction and should be listed. Because this species is a narrow endemic with few populations and population resiliency is either low (two of three populations) or moderate (third population), reduction in population resiliency can have an outsized influence on the species' overall viability. The EO records of Navasota false foxglove have been documented with a combined area of less than 2 acres. A single event, such as a prolonged drought or a single development project, could easily extirpate all or most of the remaining populations. Woody vegetation is currently negatively affecting the populations, and without woody vegetation removal or prescribed fire, the species could be reduced or eliminated from these areas that become shaded.

Population resiliency has presumably declined given the sparse number of individuals observed in recent surveys. The EO 9000 (Tyler) population has low resiliency and little to no connectivity to the other two populations, as it is greater than

100 miles away. Therefore, the likelihood of the EO 9000 (Tyler) population being able to recover from stochastic events, or be repopulated if it extirpated, is greatly reduced or eliminated.

The species as a whole possesses little adaptive capacity. The lack of connectivity and isolation of the populations has eliminated gene flow, and the species retains little ability to withstand environmental variation. As a whole, the species has limited representation and redundancy, and low to moderate resiliency of the populations, resulting in low species viability. Currently, Navasota false foxglove populations are extremely vulnerable to woody vegetation encroachment, disturbance, and environmental variation due to climate change, and the loss of a population could cascade into the extinction of the species. Thus, after assessing the best available information, we determine that the Navasota false foxglove is in danger of extinction throughout all of its range.

Status Throughout a Significant Portion of Its Range

Under the Act and our implementing regulations, a species may warrant listing if it is in danger of extinction or likely to become so within the foreseeable future throughout all or a significant portion of its range. We have determined that the Navasota false foxglove is in danger of extinction throughout all of its range and accordingly did not undertake an analysis of any significant portion of its range. Because the Navasota false foxglove warrants listing as endangered throughout all of its range, our determination does not conflict with the decision in *Center for Biological Diversity* v. *Everson*, 435 F. Supp. 3d 69 (D.D.C. 2020) (*Everson*), which vacated the provision of the Final Policy on Interpretation of the Phrase "Significant Portion of Its Range" in the Endangered Species Act's Definitions of "Endangered Species" and "Threatened Species" (79 FR 37578; July 1, 2014) providing that if the Service determines that a

species is threatened throughout all of its range, the Service will not analyze whether the species is endangered in a significant portion of its range.

Determination of Status

Our review of the best available scientific and commercial information indicates that the Navasota false foxglove meets the Act's definition of an endangered species. Therefore, we propose to list the Navasota false foxglove as an endangered species in accordance with sections 3(6) and 4(a)(1) of the Act.

Available Conservation Measures

Conservation measures provided to species listed as endangered or threatened species under the Act include recognition as a listed species, planning and implementation of recovery actions, requirements for Federal protection, and prohibitions against certain practices. Recognition through listing results in public awareness, and conservation by Federal, State, Tribal, and local agencies, private organizations, and individuals. The Act encourages cooperation with the States and other countries and calls for recovery actions to be carried out for listed species. The protection required by Federal agencies, including the Service, and the prohibitions against certain activities are discussed, in part, below.

The primary purpose of the Act is the conservation of endangered and threatened species and the ecosystems upon which they depend. The ultimate goal of such conservation efforts is the recovery of these listed species, so that they no longer need the protective measures of the Act. Section 4(f) of the Act calls for the Service to develop and implement recovery plans for the conservation of endangered and threatened species. The goal of this process is to restore listed species to a point where they are secure, self-sustaining, and functioning components of their ecosystems.

The recovery planning process begins with development of a recovery outline made available to the public soon after a final listing determination. The recovery outline

guides the immediate implementation of urgent recovery actions while a recovery plan is being developed. Recovery teams (composed of species experts, Federal and State agencies, nongovernmental organizations, and stakeholders) may be established to develop and implement recovery plans. The recovery planning process involves the identification of actions that are necessary to halt and reverse the species' decline by addressing the threats to its survival and recovery. The recovery plan identifies recovery criteria for review of when a species may be ready for reclassification from endangered to threatened ("downlisting") or removal from protected status ("delisting"), and methods for monitoring recovery progress. Recovery plans also establish a framework for agencies to coordinate their recovery efforts and provide estimates of the time and cost of implementing recovery tasks. Revisions of the plan may be done to address continuing or new threats to the species, as new substantive information becomes available. If we list the Navasota false foxglove, its recovery outline, draft recovery plan, final recovery plan, and any revisions would be available on our website as they are completed (https://www.fws.gov/program/endangered-species), or from our Texas Coastal Ecological Services Field Office (see **FOR FURTHER INFORMATION CONTACT**).

Implementation of recovery actions generally requires the participation of a broad range of partners, including other Federal agencies, States, Tribes, nongovernmental organizations, businesses, and private landowners. Examples of recovery actions include habitat restoration (e.g., restoration of native vegetation), research, captive propagation and reintroduction, and outreach and education. The recovery of many listed species cannot be accomplished solely on Federal lands because their range may occur primarily or solely on non-Federal lands. To achieve recovery of these species requires cooperative conservation efforts on private, State, and Tribal lands.

If this species is listed, funding for recovery actions will be available from a variety of sources, including Federal budgets, State programs, and cost-share grants for

non-Federal landowners, the academic community, and nongovernmental organizations. In addition, pursuant to section 6 of the Act, the State of Texas would be eligible for Federal funds to implement management actions that promote the protection or recovery of the Navasota false foxglove. Information on our grant programs that are available to aid species recovery can be found at: https://www.fws.gov/service/financial-assistance.

Although the Navasota false foxglove is only proposed for listing under the Act at this time, please let us know if you are interested in participating in recovery efforts for this species. Additionally, we invite you to submit any new information on this species whenever it becomes available and any information you may have for recovery planning purposes (see **FOR FURTHER INFORMATION CONTACT**).

Section 7(a) of the Act requires Federal agencies to evaluate their actions with respect to any species that is proposed or listed as an endangered or threatened species and with respect to its critical habitat, if any is designated. Regulations implementing this interagency cooperation provision of the Act are codified at 50 CFR part 402. Section 7(a)(4) of the Act requires Federal agencies to confer with the Service on any action that is likely to jeopardize the continued existence of a species proposed for listing or result in destruction or adverse modification of proposed critical habitat. If a species is listed subsequently, section 7(a)(2) of the Act requires Federal agencies to ensure that activities they authorize, fund, or carry out are not likely to jeopardize the continued existence of the species or destroy or adversely modify its critical habitat. If a Federal action may affect a listed species or its critical habitat, the responsible Federal agency (action agency) must enter into consultation with the Service.

Examples of actions that may be subject to the section 7 processes are land management or other landscape-altering activities on Federal lands administered by the Service, as well as actions on State, Tribal, local, or private lands that require a Federal permit (such as a permit from the U.S. Army Corps of Engineers under section 404 of the

Clean Water Act (33 U.S.C. 1251 et seq.) or a permit from the Service under section 10 of the Act) or that involve some other Federal action (such as funding from the Federal Highway Administration, Federal Aviation Administration, or the Federal Emergency Management Agency). Federal actions not affecting listed species or critical habitat—and actions on State, Tribal, local, or private lands that are not federally funded, authorized, or carried out by a Federal agency—do not require section 7 consultation. Examples of Federal agency actions that may require consultation for the Navasota false foxglove could include any other landscape-altering activities on Federal lands administered by the Federal Highway Administration for any future construction and maintenance of roads or highways. Given the difference in triggers for conferencing and consultation, Federal agencies should coordinate with the local Service field office (see FOR FURTHER INFORMATION CONTACT, above) with any specific questions.

The Act and its implementing regulations set forth a series of general prohibitions and exceptions that apply to endangered plants. The prohibitions of section 9(a)(2) of the Act, codified at 50 CFR 17.61, make it illegal for any person subject to the jurisdiction of the United States to: import or export; remove and reduce to possession from areas under Federal jurisdiction; maliciously damage or destroy on any such area; remove, cut, dig up, or damage or destroy on any other area in knowing violation of any law or regulation of any State or in the course of any violation of a State criminal trespass law; deliver, receive, carry, transport, or ship in interstate or foreign commerce, by any means whatsoever and in the course of a commercial activity; or sell or offer for sale in interstate or foreign commerce an endangered plant. Certain exceptions apply to employees of the Service, other Federal land management agencies, and State conservation agencies.

We may issue permits to carry out otherwise prohibited activities involving endangered plants under certain circumstances. Regulations governing permits are

codified at 50 CFR 17.62. With regard to endangered plants, a permit may be issued for scientific purposes or to enhance the propagation or survival of the species. The statute also contains certain exemptions from the prohibitions, which are found in sections 9 and 10 of the Act.

It is our policy, as published in the *Federal Register* on July 1, 1994 (59 FR 34272), to identify to the maximum extent practicable at the time a species is listed those activities that would or would not constitute a violation of section 9 of the Act. The intent of this policy is to increase public awareness of the effect of a proposed listing on proposed and ongoing activities within the range of the species proposed for listing.

Based on the best available information, the following actions are unlikely to result in a violation of section 9, if these activities are carried out in accordance with existing regulations and permit requirements; this list is not comprehensive:

- (1) Normal agricultural and silvicultural practices, including herbicide and pesticide use, that are carried out in accordance with any existing regulations, permit and label requirements, and best management practices; and
 - (2) Normal residential landscaping activities.

To the extent of what is currently known, trampling and other activities that would result in habitat disturbance would be considered likely to result in violation of section 9 of the Act in addition to what is already described in the prohibitions found at 50 CFR 17.61. Additional activities that will be considered likely to result in violation of section 9 of the Act may be identified during coordination with the local field office, Questions regarding whether specific activities would constitute violation of section 9 of the Act should be directed to the Texas Coastal Ecological Services Field Office (see **FOR FURTHER INFORMATION CONTACT**).

II. Critical Habitat

Background

Critical habitat is defined in section 3 of the Act as:

- (1) The specific areas within the geographical area occupied by the species, at the time it is listed in accordance with the Act, on which are found those physical or biological features
 - (a) Essential to the conservation of the species, and
 - (b) Which may require special management considerations or protection; and
- (2) Specific areas outside the geographical area occupied by the species at the time it is listed, upon a determination that such areas are essential for the conservation of the species.

Our regulations at 50 CFR 424.02 define the geographical area occupied by the species as an area that may generally be delineated around species' occurrences, as determined by the Secretary (i.e., range). Such areas may include those areas used throughout all or part of the species' life cycle, even if not used on a regular basis (e.g., migratory corridors, seasonal habitats, and habitats used periodically, but not solely by vagrant individuals).

Conservation, as defined under section 3 of the Act, means to use and the use of all methods and procedures that are necessary to bring an endangered or threatened species to the point at which the measures provided pursuant to the Act are no longer necessary. Such methods and procedures include, but are not limited to, all activities associated with scientific resources management such as research, census, law enforcement, habitat acquisition and maintenance, propagation, live trapping, and transplantation, and, in the extraordinary case where population pressures within a given ecosystem cannot be otherwise relieved, may include regulated taking.

Critical habitat receives protection under section 7 of the Act through the requirement that Federal agencies ensure, in consultation with the Service, that any action they authorize, fund, or carry out is not likely to result in the destruction or adverse modification of critical habitat. The designation of critical habitat does not affect land ownership or establish a refuge, wilderness, reserve, preserve, or other conservation area. Such designation also does not allow the government or public to access private lands. Such designation does not require implementation of restoration, recovery, or enhancement measures by non-Federal landowners. Where a landowner requests Federal agency funding or authorization for an action that may affect a listed species or critical habitat, the Federal agency would be required to consult with the Service under section 7(a)(2) of the Act. However, even if the Service were to conclude that the proposed activity would likely result in destruction or adverse modification of the critical habitat, the Federal action agency and the landowner are not required to abandon the proposed activity, or to restore or recover the species; instead, they must implement "reasonable and prudent alternatives" to avoid destruction or adverse modification of critical habitat.

Under the first prong of the Act's definition of critical habitat, areas within the geographical area occupied by the species at the time it was listed are included in a critical habitat designation if they contain physical or biological features (1) which are essential to the conservation of the species and (2) which may require special management considerations or protection. For these areas, critical habitat designations identify, to the extent known using the best scientific and commercial data available, those physical or biological features that are essential to the conservation of the species (such as space, food, cover, and protected habitat).

Under the second prong of the Act's definition of critical habitat, we can designate critical habitat in areas outside the geographical area occupied by the species at

the time it is listed, upon a determination that such areas are essential for the conservation of the species.

Section 4 of the Act requires that we designate critical habitat on the basis of the best scientific data available. Further, our Policy on Information Standards Under the Endangered Species Act (published in the *Federal Register* on July 1, 1994 (59 FR 34271)), the Information Quality Act (section 515 of the Treasury and General Government Appropriations Act for Fiscal Year 2001 (Pub. L. 106-554; H.R. 5658)), and our associated Information Quality Guidelines provide criteria, establish procedures, and provide guidance to ensure that our decisions are based on the best scientific data available. They require our biologists, to the extent consistent with the Act and with the use of the best scientific data available, to use primary and original sources of information as the basis for recommendations to designate critical habitat.

When we are determining which areas should be designated as critical habitat, our primary source of information is generally the information from the SSA report and information developed during the listing process for the species. Additional information sources may include any generalized conservation strategy, criteria, or outline that may have been developed for the species; the recovery plan for the species; articles in peer-reviewed journals; conservation plans developed by States and counties; scientific status surveys and studies; biological assessments; other unpublished materials; or experts' opinions or personal knowledge.

Habitat is dynamic, and species may move from one area to another over time. We recognize that critical habitat designated at a particular point in time may not include all of the habitat areas that we may later determine are necessary for the recovery of the species. For these reasons, a critical habitat designation does not signal that habitat outside the designated area is unimportant or may not be needed for recovery of the species. Areas that are important to the conservation of the species, both inside and

outside the critical habitat designation, will continue to be subject to: (1) Conservation actions implemented under section 7(a)(1) of the Act; (2) regulatory protections afforded by the requirement in section 7(a)(2) of the Act for Federal agencies to ensure their actions are not likely to jeopardize the continued existence of any endangered or threatened species; and (3) the prohibitions found in section 9 of the Act. Federally funded or permitted projects affecting listed species outside their designated critical habitat areas may still result in jeopardy findings in some cases. These protections and conservation tools will continue to contribute to recovery of the species. Similarly, critical habitat designations made on the basis of the best available information at the time of designation will not control the direction and substance of future recovery plans, habitat conservation plans (HCPs), or other species conservation planning efforts if new information available at the time of those planning efforts calls for a different outcome.

Prudency Determination

Section 4(a)(3) of the Act, as amended, and implementing regulations (50 CFR 424.12) require that, to the maximum extent prudent and determinable, the Secretary shall designate critical habitat at the time the species is determined to be an endangered or threatened species. Our regulations (50 CFR 424.12(a)(1)) state that the Secretary may, but is not required to, determine that a designation would not be prudent in the following circumstances:

- (i) The species is threatened by taking or other human activity and identification of critical habitat can be expected to increase the degree of such threat to the species;
- (ii) The present or threatened destruction, modification, or curtailment of a species' habitat or range is not a threat to the species, or threats to the species' habitat stem solely from causes that cannot be addressed through management actions resulting from consultations under section 7(a)(2) of the Act;

- (iii) Areas within the jurisdiction of the United States provide no more than negligible conservation value, if any, for a species occurring primarily outside the jurisdiction of the United States;
 - (iv) No areas meet the definition of critical habitat; or
- (v) The Secretary otherwise determines that designation of critical habitat would not be prudent based on the best scientific data available.

As discussed earlier in this document, there is currently no imminent threat of collection or vandalism identified under Factor B for this species, and identification and mapping of critical habitat is not expected to initiate any such threat. In our SSA report and proposed listing determination for the Navasota false foxglove, we determined that the present or threatened destruction, modification, or curtailment of habitat or range is a threat to Navasota false foxglove and that those threats in some way can be addressed by section 7(a)(2) consultation measures. The species occurs wholly in the jurisdiction of the United States, and we are able to identify areas that meet the definition of critical habitat. Therefore, because none of the circumstances enumerated in our regulations at 50 CFR 424.12(a)(1) have been met and because the Secretary has not identified other circumstances for which this designation of critical habitat would be not prudent, we have determined that the designation of critical habitat is prudent for the Navasota false foxglove.

Critical Habitat Determinability

Having determined that designation is prudent, under section 4(a)(3) of the Act we must find whether critical habitat for the Navasota false foxglove is determinable. Our regulations at 50 CFR 424.12(a)(2) state that critical habitat is not determinable when one or both of the following situations exist:

(i) Data sufficient to perform required analyses are lacking, or

(ii) The biological needs of the species are not sufficiently well known to identify any area that meets the definition of "critical habitat."

When critical habitat is not determinable, the Act allows the Service an additional year to publish a critical habitat designation (16 U.S.C. 1533(b)(6)(C)(ii)).

We reviewed the available information pertaining to the biological needs of the species and habitat characteristics where this species is located. This and other information represent the best scientific data available and led us to conclude that the designation of critical habitat is determinable for the Navasota false foxglove.

Physical or Biological Features Essential to the Conservation of the Species

In accordance with section 3(5)(A)(i) of the Act and regulations at 50 CFR 424.12(b), in determining which areas we will designate as critical habitat from within the geographical area occupied by the species at the time of listing, we consider the physical or biological features that are essential to the conservation of the species and which may require special management considerations or protection. The regulations at 50 CFR 424.02 define "physical or biological features essential to the conservation of the species" as the features that occur in specific areas and that are essential to support the life-history needs of the species, including, but not limited to, water characteristics, soil type, geological features, sites, prey, vegetation, symbiotic species, or other features. A feature may be a single habitat characteristic or a more complex combination of habitat characteristics. Features may include habitat characteristics that support ephemeral or dynamic habitat conditions. Features may also be expressed in terms relating to principles of conservation biology, such as patch size, distribution distances, and connectivity. For example, physical features essential to the conservation of the species might include gravel of a particular size required for spawning, alkaline soil for seed germination, protective cover for migration, or susceptibility to flooding or fire that maintains necessary early-successional habitat characteristics. Biological features might include

prey species, forage grasses, specific kinds or ages of trees for roosting or nesting, symbiotic fungi, or absence or a particular level of nonnative species consistent with conservation needs of the listed species. The features may also be combinations of habitat characteristics and may encompass the relationship between characteristics or the necessary amount of a characteristic essential to support the life history of the species.

In considering whether features are essential to the conservation of the species, we may consider an appropriate quality, quantity, and spatial and temporal arrangement of habitat characteristics in the context of the life-history needs, condition, and status of the species. These characteristics include, but are not limited to, space for individual and population growth and for normal behavior; food, water, air, light, minerals, or other nutritional or physiological requirements; cover or shelter; sites for breeding, reproduction, or rearing (or development) of offspring; and habitats that are protected from disturbance.

Navasota false foxglove needs well drained soils, such as rocky outcrops and sandy loam over sandstone. Plants occupy open areas of the outcrops where sun exposure is nearly constant (no more than 10 to 15 percent shade), and populations have been found in areas that have been historically ungrazed and unplowed. Additionally, the species needs the presence of the presumed host plant, little bluestem, to provide nutrients during drought. When needed, Navasota false foxglove parasitizes and extracts resources from its host plant, little bluestem, for survival and reproduction.

Summary of Essential Physical or Biological Features

We derive the specific physical or biological features essential to the conservation of Navasota false foxglove from studies of the species' habitat, ecology, and life history as described below. Additional information can be found in the SSA report (Service 2022, entire), which is available at https://www.regulations.gov under Docket No. FWS-

R2-ES-2022-0156. We have determined that the following physical or biological features are essential to the conservation of Navasota false foxglove:

- (1) Calcareous sandy to clay loam soils that are ungrazed, unplowed, shallow thin soils.
 - (2) Open prairie habitat with limited woody encroachment.
 - (3) Annual precipitation events that provide enough soil moisture to germinate.
 - (4) Full sun exposure (no more than 10 to 15 percent shade).
 - (5) Presence of the little bluestem (*Schizachyrium scoparium*) as host plant.

Special Management Considerations or Protection

When designating critical habitat, we assess whether the specific areas within the geographical area occupied by the species at the time of listing contain features which are essential to the conservation of the species and which may require special management considerations or protection. The features essential to the conservation of the species may require special management consideration or protection to reduce the threat of woody encroachment. Special management considerations or protection may be required within critical habitat areas to address these threats. Management activities that could ameliorate these threats include, but are not limited to, prescribed fire and manual removal of woody encroachment. These management activities would protect the physical or biological features for the species by opening up the habitat for more sunlight and expanding the habitat area for the species' survival. Additionally, these management activities would help increase potential habitat and allow for an expanded seed bank for this species.

Criteria Used to Identify Critical Habitat

As required by section 4(b)(2) of the Act, we use the best scientific data available to designate critical habitat. In accordance with the Act and our implementing regulations at 50 CFR 424.12(b), we review available information pertaining to the habitat

requirements of the species and identify specific areas within the geographical area occupied by the species at the time of listing and any specific areas outside the geographical area occupied by the species to be considered for designation as critical habitat. While the Navasota false foxglove needs additional areas to increase viability of the species, we are not currently proposing to designate any areas outside the geographical area occupied by the species because we have not identified any unoccupied areas that meet the definition of critical habitat. We are aware of no areas from which the species has been extirpated, and we do not currently have information sufficient to determine which other areas may be suitable for the species. We are proposing to designate critical habitat in areas within the geographical area occupied by the species at the time of listing. Within the three currently occupied areas, the physical or biological features that are common across all habitat types are limited woody encroachment, full sun exposure, host plants, and annual precipitation events that provide enough soil moisture to germinate. The Oakville formation and Catahoula formation make up the rocky outcrop component within the occupied areas along with fine sandy loam, sandy loam, and clay soils.

In summary, for areas within the geographical area occupied by the species at the time of listing, we delineated critical habitat unit boundaries using the following criteria:

The three critical habitat unit boundaries are directly related to the presence of the species on the ground. The EO6674 (East) unit boundaries were refined by survey data from the fall of 2021. The EO 6674 (West) and EO 9000 critical habitat unit boundaries were refined by using areas of presumed occupancy and information about suitable soil type and drainage compatible to the species, due to the lack of more recent survey data.

When determining proposed critical habitat boundaries, we made every effort to avoid including developed areas such as lands covered by buildings, pavement, and other structures because such lands lack physical or biological features necessary for Navasota

false foxglove. The scale of the maps we prepared under the parameters for publication within the Code of Federal Regulations may not reflect the exclusion of such developed lands. Any such lands inadvertently left inside critical habitat boundaries shown on the maps of this proposed rule have been excluded by text in the proposed rule and are not proposed for designation as critical habitat. Therefore, if the critical habitat is finalized as proposed, a Federal action involving these lands would not trigger section 7 consultation with respect to critical habitat and the requirement of no adverse modification unless the specific action would affect the physical or biological features in the adjacent critical habitat.

We propose to designate as critical habitat lands that we have determined are occupied at the time of listing (i.e., currently occupied) and that contain one or more of the physical or biological features that are essential to support life-history processes of the species. We are not aware of any additional historical locations where the species was found. Additionally, we are unable to identify suitable areas that would meet the species' needs outside of its currently occupied range. Of areas that we analyzed as potentially suitable areas, we concluded that we had no information to suggest any areas would contribute to the long-term conservation of the species. We have concluded that no unoccupied areas meet the definition of critical habitat.

All three units in Grimes and Tyler Counties, Texas, are proposed for designation based on one or more of the physical or biological features being present to support Navasota false foxglove's life-history processes. All three units in Grimes and Tyler Counties contain all of the identified physical or biological features and support multiple life-history processes.

The proposed critical habitat designation is defined by the map or maps, as modified by any accompanying regulatory text, presented at the end of this document under **Proposed Regulation Promulgation**. We include more detailed information on

the boundaries of the critical habitat designation in the preamble of this document. We will make the coordinates or plot points or both on which each map is based available to the public on https://www.regulations.gov at Docket No. FWS-R2-ES-2022-0156 and on our internet site at https://www.fws.gov/office/texas-coastal-ecological-services.

Proposed Critical Habitat Designation

We are proposing approximately 1.9 acres (ac) (0.8 hectares (ha)) in three units as critical habitat for the Navasota false foxglove. The critical habitat areas we describe below constitute our current best assessment of areas that meet the definition of critical habitat for the Navasota false foxglove. The three areas we propose as critical habitat are:

(1) EO 6674 (East) Unit, (2) EO 6674 (West) Unit, and (3) EO 9000 (Tyler) Unit. Table 4 shows the proposed critical habitat units and the approximate area of each unit.

Table 4. Proposed Critical Habitat Units for Navasota False Foxglove.

Unit	Area (acres)	Area (hectares)	Landowner/Land	Occupied?
			Manager(s)	
1. EO 6674 (East)	0.8	0.3	Private	Yes
2. EO 6674 (West)	0.5	0.2	Private	Yes
3. EO 9000 (Tyler)	0.6	0.2	Private	Yes
Total	1.9	0.8	_	

Note: Area sizes may not sum due to rounding.

Unit 1: EO 6674 (East)

Unit 1 consists of 0.8 ac (0.3 ha) and is located 4 miles just to the northeast of the town of Navasota, in Grimes County, Texas. Unit 1 is completely on private land and can be accessed by a public road. Farm to Market Road 3090 runs along the eastern side of this unit, and a portion of the unit is within the Texas Department of Transportation right-of-way. Unit 1 consists of rolling hills with a rocky outcrop (Oakville Formation) and well-drained soils. The area has edges of woody vegetation that give way to open areas of full sunlight. This unit is occupied and has been since the initial identification of the Navasota false foxglove in 1993. It contains all of the physical or biological features needed for the Navasota false foxglove. Special management considerations may be

required to reduce encroachment from woody vegetation to maintain open prairie and full sun exposure.

Unit 2: EO 6674 (West)

Unit 2 consists of 0.5 ac (0.2 ha) and is located about 3.5 miles northeast of the town of Navasota, in Grimes County, Texas. This area is occupied and located about 0.9 miles to the west of Unit EO 6674 (East). The unit occurs along the Oakville formation that extends across southeast Texas. This formation gives way to rocky outcrop areas that have well-drained soils and areas of rolling hills. This unit is just off County Road 403 in Grimes County and is owned by private landowners. The area has been leased to a cattle association since 2019. It contains all of the physical or biological features needed for the Navasota false foxglove. Special management considerations may be required to reduce encroachment from woody vegetation to maintain open prairie and full sun exposure.

Unit 3: EO 9000 (Tyler)

Unit 3 consists of 0.6 ac (0.2 ha) and is located approximately 7 miles to the northwest of Colmesneil, Texas, in Tyler County. This area is occupied along a roadside right-of-way. This site is more than 100 miles to the northeast of Units 1 and 2 in Grimes County. This site is located on the Catahoula formation along with rolling hills, well-drained soils, and timber activity. This site has previously been harvested for timber and is currently owned by a timber company. This site is located just along the roadside of County Road 2845. It contains all of the physical or biological features needed for the Navasota false foxglove. Special management considerations may be required to reduce encroachment from woody vegetation to maintain open prairie and full sun exposure.

Effects of Critical Habitat Designation

Section 7 Consultation

Section 7(a)(2) of the Act requires Federal agencies, including the Service, to ensure that any action they fund, authorize, or carry out is not likely to jeopardize the continued existence of any endangered species or threatened species or result in the destruction or adverse modification of designated critical habitat of such species. In addition, section 7(a)(4) of the Act requires Federal agencies to confer with the Service on any agency action which is likely to jeopardize the continued existence of any species proposed to be listed under the Act or result in the destruction or adverse modification of proposed critical habitat.

We published a final rule revising the definition of destruction or adverse modification on August 27, 2019 (84 FR 44976). Destruction or adverse modification means a direct or indirect alteration that appreciably diminishes the value of critical habitat as a whole for the conservation of a listed species.

Compliance with the requirements of section 7(a)(2) is documented through our issuance of:

- (1) A concurrence letter for Federal actions that may affect, but are not likely to adversely affect, listed species or critical habitat; or
- (2) A biological opinion for Federal actions that may affect, and are likely to adversely affect, listed species or critical habitat.

When we issue a biological opinion concluding that a project is likely to jeopardize the continued existence of a listed species and/or destroy or adversely modify critical habitat, we provide reasonable and prudent alternatives to the project, if any are identifiable, that would avoid the likelihood of jeopardy and/or destruction or adverse modification of critical habitat. We define "reasonable and prudent alternatives" (at 50 CFR 402.02) as alternative actions identified during consultation that:

- (1) Can be implemented in a manner consistent with the intended purpose of the action,
- (2) Can be implemented consistent with the scope of the Federal agency's legal authority and jurisdiction,
 - (3) Are economically and technologically feasible, and
- (4) Would, in the Service Director's opinion, avoid the likelihood of jeopardizing the continued existence of the listed species and/or avoid the likelihood of destroying or adversely modifying critical habitat.

Reasonable and prudent alternatives can vary from slight project modifications to extensive redesign or relocation of the project. Costs associated with implementing a reasonable and prudent alternative are similarly variable.

Regulations at 50 CFR 402.16 set forth requirements for Federal agencies to reinitiate consultation if any of the following four conditions occur: (1) the amount or extent of taking specified in the incidental take statement is exceeded; (2) new information reveals effects of the action that may affect listed species or critical habitat in a manner or to an extent not previously considered; (3) the identified action is subsequently modified in a manner that causes an effect to the listed species or critical habitat that was not considered in the biological opinion or written concurrence; or (4) a new species is listed or critical habitat designated that may be affected by the identified action. The reinitiation requirement applies only to actions that remain subject to some discretionary Federal involvement or control. As provided in 50 CFR 402.16, the requirement to reinitiate consultations for new species listings or critical habitat designation does not apply to certain agency actions (e.g., land management plans issued by the Bureau of Land Management in certain circumstances.

Application of the "Destruction or Adverse Modification" Standard

The key factor related to the destruction or adverse modification determination is whether implementation of the proposed Federal action directly or indirectly alters the designated critical habitat in a way that appreciably diminishes the value of the critical habitat as a whole for the conservation of the listed species. As discussed above, the role of critical habitat is to support physical or biological features essential to the conservation of a listed species and provide for the conservation of the species.

Section 4(b)(8) of the Act requires us to briefly evaluate and describe, in any proposed or final regulation that designates critical habitat, activities involving a Federal action that may violate section 7(a)(2) of the Act by destroying or adversely modifying such habitat, or that may be affected by such designation.

Activities that we may, during a consultation under section 7(a)(2) of the Act, consider likely to destroy or adversely modify critical habitat include, but are not limited to, actions that would permanently destroy habitat and would result in complete destruction of habitat and any viable seed bank for this species. Such activities could include, but are not limited to, widening Farm to Market Road 3090 in Grimes County, developing timber roads to access timber harvesting, and allowing areas to become overgrown with woody vegetation. These activities could reduce the amount of sunlight available for the species' survival and could potentially destroy the habitat and any viable seed bank in the area.

Exemptions

Application of Section 4(a)(3) of the Act

Section 4(a)(3)(B)(i) of the Act (16 U.S.C. 1533(a)(3)(B)(i)) provides that the Secretary shall not designate as critical habitat any lands or other geographical areas owned or controlled by the Department of Defense (DOD), or designated for its use, that are subject to an integrated natural resources management plan (INRMP) prepared under section 101 of the Sikes Act Improvement Act of 1997 (16 U.S.C. 670a), if the Secretary

determines in writing that such plan provides a benefit to the species for which critical habitat is proposed for designation. No DOD lands with a completed INRMP are within the proposed critical habitat designation.

Consideration of Impacts under Section 4(b)(2) of the Act

Section 4(b)(2) of the Act states that the Secretary shall designate and make revisions to critical habitat on the basis of the best available scientific data after taking into consideration the economic impact, national security impact, and any other relevant impact of specifying any particular area as critical habitat. The Secretary may exclude an area from designated critical habitat based on economic impacts, impacts on national security, or any other relevant impacts. Exclusion decisions are governed by the regulations at 50 CFR 424.19 and the Policy Regarding Implementation of Section 4(b)(2) of the Endangered Species Act (hereafter, the "2016 Policy"; 81 FR 7226, February 11, 2016), both of which were developed jointly with the National Marine Fisheries Service (NMFS). We also refer to a 2008 Department of the Interior Solicitor's opinion entitled, "The Secretary's Authority to Exclude Areas from a Critical Habitat Designation under Section 4(b)(2) of the Endangered Species Act" (M-37016). In our final designation, we will explain each decision to exclude areas, as well as decisions not to exclude, to demonstrate that the decision is reasonable.

In considering whether to exclude a particular area from the designation, we identify the benefits of including the area in the designation, identify the benefits of excluding the area from the designation, and evaluate whether the benefits of exclusion outweigh the benefits of inclusion. If the analysis indicates that the benefits of exclusion outweigh the benefits of inclusion, the Secretary may exercise discretion to exclude the area only if such exclusion would not result in the extinction of the species. In making the determination to exclude a particular area, the statute on its face, as well as the legislative history, are clear that the Secretary has broad discretion regarding which factor(s) to use

and how much weight to give to any factor. In our final rules, we explain any decision to exclude areas, as well as decisions not to exclude, to demonstrate that the decision is reasonable. We describe below the process that we use for taking into consideration each category of impacts and any initial analyses of the relevant impacts.

Consideration of Economic Impacts

Section 4(b)(2) of the Act and its implementing regulations require that we consider the economic impact that may result from a designation of critical habitat. To assess the probable economic impacts of a designation, we must first evaluate specific land uses or activities and projects that may occur in the area of the critical habitat. We then must evaluate the impacts that a specific critical habitat designation may have on restricting or modifying specific land uses or activities for the benefit of the species and its habitat within the areas proposed. We then identify which conservation efforts may be the result of the species being listed under the Act versus those attributed solely to the designation of critical habitat for this particular species. The probable economic impact of a proposed critical habitat designation is analyzed by comparing scenarios both "with critical habitat" and "without critical habitat."

The "without critical habitat" scenario represents the baseline for the analysis, which includes the existing regulatory and socio-economic burden imposed on landowners, managers, or other resource users potentially affected by the designation of critical habitat (e.g., under the Federal listing as well as other Federal, State, and local regulations). Therefore, the baseline represents the costs of all efforts attributable to the listing of the species under the Act (i.e., conservation of the species and its habitat incurred regardless of whether critical habitat is designated). The "with critical habitat" scenario describes the incremental impacts associated specifically with the designation of critical habitat for the species. The incremental conservation efforts and associated impacts would not be expected without the designation of critical habitat for the species.

In other words, the incremental costs are those attributable solely to the designation of critical habitat, above and beyond the baseline costs. These are the costs we use when evaluating the benefits of inclusion and exclusion of particular areas from the final designation of critical habitat should we choose to conduct a discretionary 4(b)(2) exclusion analysis.

Executive Orders (E.O.s) 12866 and 13563 direct Federal agencies to assess the costs and benefits of available regulatory alternatives in quantitative (to the extent feasible) and qualitative terms. Consistent with the E.O. regulatory analysis requirements, our effects analysis under the Act may take into consideration impacts to both directly and indirectly affected entities, where practicable and reasonable. If sufficient data are available, we assess to the extent practicable the probable impacts to both directly and indirectly affected entities. Section 3(f) of E.O. 12866 identifies four criteria when a regulation is considered a "significant regulatory action", and requires additional analysis, review, and approval if met. The criterion relevant here is whether the designation of critical habitat may have an economic effect of \$100 million or more in any given year (section 3(f)(1)). Therefore, our consideration of economic impacts uses a screening analysis to assess whether a designation of critical habitat for the Navasota false foxglove is likely to exceed the economically significant threshold.

For this particular designation, we developed an incremental effects memorandum (IEM) considering the probable incremental economic impacts that may result from this proposed designation of critical habitat. The information contained in our IEM was then used to develop a screening analysis of the probable effects of the designation of critical habitat for the Navasota false foxglove (IEc 2022, entire). We began by conducting a screening analysis of the proposed designation of critical habitat in order to focus our analysis on the key factors that are likely to result in incremental economic impacts. The purpose of the screening analysis is to filter out particular geographic areas of critical

habitat that are already subject to such protections and are, therefore, unlikely to incur incremental economic impacts. In particular, the screening analysis considers baseline costs (i.e., absent critical habitat designation) and includes any probable incremental economic impacts where land and water use may already be subject to conservation plans, land management plans, best management practices, or regulations that protect the habitat area as a result of the Federal listing status of the species. Ultimately, the screening analysis allows us to focus our analysis on evaluating the specific areas or sectors that may incur probable incremental economic impacts as a result of the designation. The presence of the listed species in occupied areas of critical habitat means that any destruction or adverse modification of those areas is also likely to jeopardize the continued existence of the species. Therefore, designating occupied areas as critical habitat typically causes little if any incremental impacts above and beyond the impacts of listing the species. As a result, we generally focus the screening analysis on areas of unoccupied critical habitat (unoccupied units or unoccupied areas within occupied units). Overall, the screening analysis assesses whether any additional management or conservation efforts may incur incremental economic impacts. This screening analysis combined with the information contained in our IEM constitute what we consider to be our draft economic analysis (DEA) of the proposed critical habitat designation for the Navasota false foxglove; our DEA is summarized in the narrative below.

As part of our screening analysis, we considered the types of economic activities that are likely to occur within the areas likely affected by the critical habitat designation. In our evaluation of the probable incremental economic impacts that may result from the proposed designation of critical habitat for the Navasota false foxglove, first we identified, in the IEM dated July 20, 2022, probable incremental economic impacts associated with vegetation management and prescribed fire. We considered each industry or category individually. Additionally, we considered whether their activities have any

Federal involvement. Critical habitat designation generally will not affect activities that do not have any Federal involvement; under the Act, designation of critical habitat only affects activities conducted, funded, permitted, or authorized by Federal agencies. If we list the species, in areas where the Navasota false foxglove is present, Federal agencies would be required to consult with the Service under section 7 of the Act on activities they fund, permit, or implement that may affect the species. If, when we list the species, we also finalize this proposed critical habitat designation, Federal agencies would be required to consider the effects of their actions on the designated habitat, and if the Federal action may affect critical habitat, our consultations would include an evaluation of measures to avoid the destruction or adverse modification of critical habitat.

In our IEM, we attempted to clarify the distinction between the effects that would result from the species being listed and those attributable to the critical habitat designation (i.e., difference between the jeopardy and adverse modification standards) for the Navasota false foxglove's critical habitat. Because the designation of critical habitat for Navasota false foxglove is proposed concurrently with the listing, it has been our experience that it is more difficult to discern which conservation efforts are attributable to the species being listed and those which would result solely from the designation of critical habitat. However, the following specific circumstances in this case help to inform our evaluation: (1) The essential physical or biological features identified for critical habitat are the same features essential for the life requisites of the species, and (2) any actions that would result in sufficient harm or harassment to constitute jeopardy to the Navasota false foxglove would also likely adversely affect the essential physical or biological features of critical habitat. The IEM outlines our rationale concerning this limited distinction between baseline conservation efforts and incremental impacts of the designation of critical habitat for this species. This evaluation of the incremental effects has been used as the basis to evaluate the probable incremental economic impacts of this

proposed designation of critical habitat.

The proposed critical habitat designation for the Navasota false foxglove totals approximately 1.9 ac (0.8 ha) in Grimes and Tyler Counties, Texas, and is divided into three units. All three units are currently occupied by species. In these areas any actions that may affect the species or its habitat would also affect designated critical habitat, and it is unlikely that any additional conservation efforts would be recommended to address adverse modification over and above those recommended as necessary to avoid jeopardizing the continued existence of Navasota false foxglove. Therefore, only administrative costs are expected to result from the proposed critical habitat designation. The only incremental impact of critical habitat designation that we anticipate is the small (not expected to exceed \$2,800 per year) administrative effort required during section 7 consultation to document effects on the physical or biological features of the critical habitat and whether the action appreciably diminishes the value of critical habitat as a whole for the conservation of the listed species (IEc 2022, p. 8). While this additional analysis will require time and resources by the Federal action agency and the Service (if a Federal nexus exists), it is believed that, in most circumstances, these costs would predominantly be administrative in nature and would not be significant.

We are soliciting data and comments from the public on the draft economic analysis discussed above, as well as on all aspects of this proposed rule and our required determinations. During the development of a final designation, we will consider the information presented in the economic analysis and any additional information on economic impacts we receive during the public comment period to determine whether any specific areas should be excluded from the final critical habitat designation under the authority of section 4(b)(2) of the Act and our implementing regulations at 50 CFR 424.19 and the 2016 Policy. We may exclude an area from critical habitat if we determine that the benefits of excluding the area outweigh the benefits of including the

area, provided the exclusion will not result in the extinction of this species.

Consideration of National Security Impacts

Section 4(a)(3)(B)(i) of the Act may not cover all DOD lands or areas that pose potential national-security concerns (e.g., a DOD installation that is in the process of revising its INRMP for a newly listed species or a species previously not covered). If a particular area is not covered under section 4(a)(3)(B)(i), then national-security or homeland-security concerns are not a factor in the process of determining what areas meet the definition of "critical habitat." However, the Service must still consider impacts on national security, including homeland security, on those lands or areas not covered by section 4(a)(3)(B)(i), because section 4(b)(2) requires the Service to consider those impacts whenever it designates critical habitat. Accordingly, if DOD, Department of Homeland Security (DHS), or another Federal agency has requested exclusion based on an assertion of national-security or homeland-security concerns, or we have otherwise identified national-security or homeland-security impacts from designating particular areas as critical habitat, we generally have reason to consider excluding those areas.

However, we cannot automatically exclude requested areas. When DOD, DHS, or another Federal agency requests exclusion from critical habitat on the basis of national-security or homeland-security impacts, we must conduct an exclusion analysis if the Federal requester provides credible information, including a reasonably specific justification of an incremental impact on national security that would result from the designation of that specific area as critical habitat. That justification could include demonstration of probable impacts, such as impacts to ongoing border-security patrols and surveillance activities, or a delay in training or facility construction, as a result of compliance with section 7(a)(2) of the Act. If the agency requesting the exclusion does not provide us with a reasonably specific justification, we will contact the agency to recommend that it provide a specific justification or clarification of its concerns relative

to the probable incremental impact that could result from the designation. If we conduct an exclusion analysis because the agency provides a reasonably specific justification or because we decide to exercise the discretion to conduct an exclusion analysis, we will defer to the expert judgment of DOD, DHS, or another Federal agency as to: (1) Whether activities on its lands or waters, or its activities on other lands or waters, have national-security or homeland-security implications; (2) the importance of those implications; and (3) the degree to which the cited implications would be adversely affected in the absence of an exclusion. In that circumstance, in conducting a discretionary section 4(b)(2) exclusion analysis, we will give great weight to national-security and homeland-security concerns in analyzing the benefits of exclusion.

In preparing this proposal, we have determined that the lands within the proposed designation of critical habitat for Navasota false foxglove are not owned or managed by the DOD or DHS, and, therefore, we anticipate no impact on national security or homeland security.

Consideration of Other Relevant Impacts

Under section 4(b)(2) of the Act, we consider any other relevant impacts, in addition to economic impacts and impacts on national security discussed above. To identify other relevant impacts that may affect the exclusion analysis, we consider a number of factors, including whether there are permitted conservation plans covering the species in the area—such as habitat conservation plans (HCPs), safe harbor agreements (SHAs), or candidate conservation agreements with assurances (CCAAs)—or whether there are non-permitted conservation agreements and partnerships that may be impaired by designation of, or exclusion from, critical habitat. In addition, we look at whether Tribal conservation plans or partnerships, Tribal resources, or government-to-government relationships of the United States with Tribal entities may be affected by the designation. We also consider any State, local, social, or other impacts that might occur because of the

designation.

Summary of Exclusions Considered Under Section 4(b)(2) of the Act

In preparing this proposal, we have determined that no HCPs or other management plans for the Navasota false foxglove currently exist, and the proposed designation does not include any Tribal lands or trust resources or any lands for which designation would have any economic or national security impacts. Therefore, we anticipate no impact on Tribal lands, partnerships, or HCPs from this proposed critical habitat designation, and thus, as described above, we are not considering excluding any particular areas on the basis of the presence of conservation agreements or impacts to trust resources.

However, if through the public comment period we receive information that we determine indicates that there are potential economic, national security, or other relevant impacts from designating particular areas as critical habitat, then as part of developing the final designation of critical habitat, we will evaluate that information and may conduct a discretionary exclusion analysis to determine whether to exclude those areas under authority of section 4(b)(2) of the Act and our implementing regulations at 50 CFR 424.19. If we receive a request for exclusion of a particular area and after evaluation of supporting information we do not exclude, we will fully describe our decision in the final rule for this action.

Required Determinations

Clarity of the Rule

We are required by E.O.s 12866 and 12988 and by the Presidential Memorandum of June 1, 1998, to write all rules in plain language. This means that each rule we publish must:

- (1) Be logically organized;
- (2) Use the active voice to address readers directly;

- (3) Use clear language rather than jargon;
- (4) Be divided into short sections and sentences; and
- (5) Use lists and tables wherever possible.

If you feel that we have not met these requirements, send us comments by one of the methods listed in **ADDRESSES**. To better help us revise the rule, your comments should be as specific as possible. For example, you should tell us the numbers of the sections or paragraphs that are unclearly written, which sections or sentences are too long, the sections where you feel lists or tables would be useful, etc.

Regulatory Planning and Review (Executive Orders 12866 and 13563, and 14094)

Executive Order 12866, as reaffirmed by E.O. 13563 and E.O. 14094, provides that the Office of Information and Regulatory Affairs (OIRA) in the Office of Management and Budget will review all significant rules. OIRA has determined that this rule is not significant.

Executive Order 14094 reaffirms the principles of E.O. 12866 and E.O. 13563 and states that regulatory analysis should facilitate agency efforts to develop regulations that serve the public interest, advance statutory objectives, and are consistent with E.O. 12866, E.O. 13563, and the Presidential Memorandum of January 20, 2021 (Modernizing Regulatory Review). Regulatory analysis, as practicable and appropriate, shall recognize distributive impacts and equity, to the extent permitted by law. We have developed this proposed rule in a manner consistent with these requirements. E.O. 13563 emphasizes further that regulations must be based on the best available science and that the rulemaking process must allow for public participation and an open exchange of ideas. We have developed this proposed rule in a manner consistent with these requirements. Regulatory Flexibility Act (5 U.S.C. 601 et seq.)

Under the Regulatory Flexibility Act (RFA; 5 U.S.C. 601 et seq.), as amended by the Small Business Regulatory Enforcement Fairness Act of 1996 (SBREFA; 5 U.S.C.

801 et seq.), whenever an agency is required to publish a notice of rulemaking for any proposed or final rule, it must prepare and make available for public comment a regulatory flexibility analysis that describes the effects of the rule on small entities (i.e., small businesses, small organizations, and small government jurisdictions). However, no regulatory flexibility analysis is required if the head of the agency certifies the rule will not have a significant economic impact on a substantial number of small entities. The SBREFA amended the RFA to require Federal agencies to provide a certification statement of the factual basis for certifying that the rule will not have a significant economic impact on a substantial number of small entities.

According to the Small Business Administration, small entities include small organizations such as independent nonprofit organizations; small governmental jurisdictions, including school boards and city and town governments that serve fewer than 50,000 residents; and small businesses (13 CFR 121.201). Small businesses include manufacturing and mining concerns with fewer than 500 employees, wholesale trade entities with fewer than 100 employees, retail and service businesses with less than \$5 million in annual sales, general and heavy construction businesses with less than \$27.5 million in annual business, special trade contractors doing less than \$11.5 million in annual business, and agricultural businesses with annual sales less than \$750,000. To determine whether potential economic impacts to these small entities are significant, we considered the types of activities that might trigger regulatory impacts under this designation as well as types of project modifications that may result. In general, the term "significant economic impact" is meant to apply to a typical small business firm's business operations.

Under the RFA, as amended, and as understood in light of recent court decisions,
Federal agencies are required to evaluate the potential incremental impacts of rulemaking
on those entities directly regulated by the rulemaking itself; in other words, the RFA does

not require agencies to evaluate the potential impacts to indirectly regulated entities. The regulatory mechanism through which critical habitat protections are realized is section 7 of the Act, which requires Federal agencies, in consultation with the Service, to ensure that any action authorized, funded, or carried out by the agency is not likely to destroy or adversely modify critical habitat. Therefore, under section 7, only Federal action agencies are directly subject to the specific regulatory requirement (avoiding destruction and adverse modification) imposed by critical habitat designation. Consequently, it is our position that only Federal action agencies would be directly regulated if we adopt the proposed critical habitat designation. The RFA does not require evaluation of the potential impacts to entities not directly regulated. Moreover, Federal agencies are not small entities. Therefore, because no small entities would be directly regulated by this rulemaking, the Service certifies that, if made final as proposed, the proposed critical habitat designation would not have a significant economic impact on a substantial number of small entities.

In summary, we have considered whether the proposed designation would result in a significant economic impact on a substantial number of small entities. For the above reasons and based on currently available information, we certify that, if made final, the proposed critical habitat designation would not have a significant economic impact on a substantial number of small business entities. Therefore, an initial regulatory flexibility analysis is not required.

Energy Supply, Distribution, or Use—Executive Order 13211

Executive Order 13211 (Actions Concerning Regulations That Significantly Affect Energy Supply, Distribution, or Use) requires agencies to prepare Statements of Energy Effects when undertaking certain actions. In our economic analysis, we did not find that this proposed critical habitat designation would significantly affect energy

supplies, distribution, or use. Therefore, this action is not a significant energy action, and no Statement of Energy Effects is required.

Unfunded Mandates Reform Act (2 U.S.C. 1501 et seq.)

In accordance with the Unfunded Mandates Reform Act (2 U.S.C. 1501 et seq.), we make the following finding:

(1) This proposed rule would not produce a Federal mandate. In general, a Federal mandate is a provision in legislation, statute, or regulation that would impose an enforceable duty upon State, local, or Tribal governments, or the private sector, and includes both "Federal intergovernmental mandates" and "Federal private sector mandates." These terms are defined in 2 U.S.C. 658(5)–(7). "Federal intergovernmental mandate" includes a regulation that "would impose an enforceable duty upon State, local, or Tribal governments" with two exceptions. It excludes "a condition of Federal assistance." It also excludes "a duty arising from participation in a voluntary Federal program," unless the regulation "relates to a then-existing Federal program under which \$500,000,000 or more is provided annually to State, local, and Tribal governments under entitlement authority," if the provision would "increase the stringency of conditions of assistance" or "place caps upon, or otherwise decrease, the Federal Government's responsibility to provide funding," and the State, local, or Tribal governments "lack authority" to adjust accordingly. At the time of enactment, these entitlement programs were: Medicaid: Aid to Families with Dependent Children work programs; Child Nutrition; Food Stamps; Social Services Block Grants; Vocational Rehabilitation State Grants; Foster Care, Adoption Assistance, and Independent Living; Family Support Welfare Services; and Child Support Enforcement. "Federal private sector mandate" includes a regulation that "would impose an enforceable duty upon the private sector, except (i) a condition of Federal assistance or (ii) a duty arising from participation in a voluntary Federal program."

The designation of critical habitat does not impose a legally binding duty on non-Federal Government entities or private parties. Under the Act, the only regulatory effect is that Federal agencies must ensure that their actions are not likely to destroy or adversely modify critical habitat under section 7. While non-Federal entities that receive Federal funding, assistance, or permits, or that otherwise require approval or authorization from a Federal agency for an action, may be indirectly impacted by the designation of critical habitat, the legally binding duty to avoid destruction or adverse modification of critical habitat rests squarely on the Federal agency. Furthermore, to the extent that non-Federal entities are indirectly impacted because they receive Federal assistance or participate in a voluntary Federal aid program, the Unfunded Mandates Reform Act would not apply, nor would critical habitat shift the costs of the large entitlement programs listed above onto State governments.

(2) We do not believe that this proposed rule would significantly or uniquely affect small governments because it will not produce a Federal mandate of \$100 million or greater in any year, that is, it is not a "significant regulatory action" under the Unfunded Mandates Reform Act. The designation of critical habitat imposes no obligations on State or local governments and, as such, a Small Government Agency Plan is not required.

Takings—Executive Order 12630

In accordance with E.O. 12630 (Government Actions and Interference with Constitutionally Protected Private Property Rights), we have analyzed the potential takings implications of designating critical habitat for Navasota false foxglove in a takings implications assessment. The Act does not authorize the Service to regulate private actions on private lands or confiscate private property as a result of critical habitat designation. Designation of critical habitat does not affect land ownership, or establish any closures, or restrictions on use of or access to the designated areas. Furthermore, the

designation of critical habitat does not affect landowner actions that do not require Federal funding or permits, nor does it preclude development of habitat conservation programs or issuance of incidental take permits to permit actions that do require Federal funding or permits to go forward. However, Federal agencies are prohibited from carrying out, funding, or authorizing actions that would destroy or adversely modify critical habitat. A takings implications assessment has been completed for the proposed designation of critical habitat for Navasota false foxglove, and it concludes that, if adopted, this designation of critical habitat would not pose significant takings implications for lands within or affected by the designation.

Federalism—Executive Order 13132

In accordance with E.O. 13132 (Federalism), this proposed rule does not have significant Federalism effects. A federalism summary impact statement is not required. In keeping with Department of the Interior and Department of Commerce policy, we requested information from, and coordinated development of this proposed critical habitat designation with, appropriate State resource agencies. From a federalism perspective, the designation of critical habitat directly affects only the responsibilities of Federal agencies. The Act imposes no other duties with respect to critical habitat, either for States and local governments, or for anyone else. As a result, the proposed rule does not have substantial direct effects either on the States, or on the relationship between the Federal government and the States, or on the distribution of powers and responsibilities among the various levels of government. The proposed designation may have some benefit to these governments because the areas that contain the features essential to the conservation of the species are more clearly defined, and the physical or biological features of the habitat necessary for the conservation of the species are specifically identified. This information does not alter where and what federally sponsored activities

may occur. However, it may assist State and local governments in long-range planning because they no longer have to wait for case-by-case section 7 consultations to occur.

Where State and local governments require approval or authorization from a Federal agency for actions that may affect critical habitat, consultation under section 7(a)(2) of the Act would be required. While non-Federal entities that receive Federal funding, assistance, or permits, or that otherwise require approval or authorization from a Federal agency for an action, may be indirectly impacted by the designation of critical habitat, the legally binding duty to avoid destruction or adverse modification of critical habitat rests squarely on the Federal agency.

Civil Justice Reform—Executive Order 12988

In accordance with E.O. 12988 (Civil Justice Reform), the Office of the Solicitor has determined that the rule would not unduly burden the judicial system and that it meets the requirements of sections 3(a) and 3(b)(2) of the Order. We have proposed designating critical habitat in accordance with the provisions of the Act. To assist the public in understanding the habitat needs of the species, this proposed rule identifies the physical or biological features essential to the conservation of the species. The proposed areas of critical habitat are presented on maps, and the proposed rule provides several options for the interested public to obtain more detailed location information, if desired. *Paperwork Reduction Act of 1995 (44 U.S.C. 3501 et seq.)*

This rule does not contain information collection requirements, and a submission to the Office of Management and Budget (OMB) under the Paperwork Reduction Act of 1995 (44 U.S.C. 3501 et seq.) is not required. We may not conduct or sponsor and you are not required to respond to a collection of information unless it displays a currently valid OMB control number.

Regulations adopted pursuant to section 4(a) of the Act are exempt from the National Environmental Policy Act (NEPA; 42 U.S.C. 4321 et seq.) and do not require an environmental analysis under NEPA. We published a notice outlining our reasons for this determination in the *Federal Register* on October 25, 1983 (48 FR 49244). This includes listing, delisting, and reclassification rules, as well as critical habitat designations. In a line of cases starting with *Douglas County* v. *Babbitt*, 48 F.3d 1495 (9th Cir. 1995), the courts have upheld this position.

Government-to-Government Relationship with Tribes

In accordance with the President's memorandum of April 29, 1994 (Government-to-Government Relations with Native American Tribal Governments; 59 FR 22951), E.O. 13175 (Consultation and Coordination with Indian Tribal Governments), and the Department of the Interior's manual at 512 DM 2, we readily acknowledge our responsibility to communicate meaningfully with federally recognized Tribes on a government-to-government basis. In accordance with Secretary's Order 3206 of June 5, 1997 (American Indian Tribal Rights, Federal-Tribal Trust Responsibilities, and the Endangered Species Act), we readily acknowledge our responsibilities to work directly with Tribes in developing programs for healthy ecosystems, to acknowledge that Tribal lands are not subject to the same controls as Federal public lands, to remain sensitive to Indian culture, and to make information available to Tribes. We have determined that no Tribal lands fall within the boundaries of the proposed critical habitat designation for the Navasota false foxglove, so no Tribal lands would be affected by the proposed designation.

References Cited

A complete list of references cited in this rulemaking is available on the internet at https://www.regulations.gov and upon request from the Texas Coastal Ecological Services Field Office (see **FOR FURTHER INFORMATION CONTACT**).

Authors

The primary authors of this proposed rule are the staff members of the Fish and Wildlife Service's Species Assessment Team and the Texas Coastal Ecological Services Field Office.

List of Subjects in 50 CFR Part 17

Endangered and threatened species, Exports, Imports, Plants, Reporting and recordkeeping requirements, Transportation, Wildlife.

Proposed Regulation Promulgation

Accordingly, we propose to amend part 17, subchapter B of chapter I, title 50 of the Code of Federal Regulations, as set forth below:

PART 17—ENDANGERED AND THREATENED WILDLIFE AND PLANTS

1. The authority citation for part 17 continues to read as follows:

AUTHORITY: 16 U.S.C. 1361-1407; 1531-1544; and 4201-4245, unless otherwise noted.

2. In § 17.12, amend paragraph (h) by adding an entry for "Agalinis navasotensis" to the List of Endangered and Threatened Plants in alphabetical order under FLOWERING PLANTS to read as follows:

§ 17.12 Endangered and threatened plants.

(h) * * *

	Scientific name			(Common name	Where listed	Status	Listing citations and applicable rules		
FI *	FLOWERING PLANTS * * * * * * *									

Agalinis navasotensis	Navasota false foxglove	Wherever found	Е	[Federal Register citation when published as a final rule]; 50 CFR 17.96(a).CH
* * * * * *	· *	<u>I</u>		30 CIR 17.30(u).

3. In § 17.96, amend paragraph (a) by adding an entry for "Family Orobanchaceae: *Agalinis navasotensis* (Navasota false foxglove)" immediately following the entry for "Family Orobanchaceae: *Castilleja cinerea* (ash-gray Indian paintbrush)" to read as follows:

§ 17.96 Critical habitat—plants.

(a) Flowering plants.

* * * * *

Family Orobanchaceae: Agalinis navasotensis (Navasota false foxglove)

- (1) Critical habitat units are depicted for Grimes and Tyler Counties, Texas, on the maps in this entry.
- (2) Within these areas, the physical or biological features essential to the conservation of Navasota false foxglove consist of the following components:
- (i) Calcareous sandy to clay loam soils that are ungrazed, unplowed, shallow thin soils.
 - (ii) Open prairie habitat with limited woody encroachment.
 - (iii) Annual precipitation events that provide enough soil moisture to germinate.
 - (iv) Full sun exposure (no more than 10 to 15 percent shade).
 - (v) Presence of the little bluestem (Schizachyrium scoparium) as host plant.
- (3) Critical habitat does not include manmade structures (such as buildings, aqueducts, runways, roads, and other paved areas) and the land on which they are located existing within the legal boundaries on the effective date of the final rule.
- (4) Data layers defining critical habitat units were created using stream segments from the U.S. Geological Survey National Hydrography Dataset. The maps in this entry,

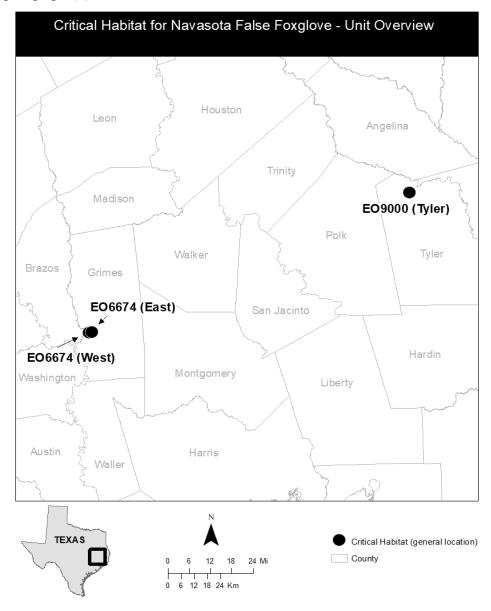
as modified by any accompanying regulatory text, establish the boundaries of the critical habitat designation. The coordinates or plot points or both on which each map is based are available to the public at the Service's internet site at

https://www.fws.gov/office/texas-coastal-ecological-services or at

https://www.regulations.gov at Docket No. FWS-R2-ES-2022-0156.

(5) Index map follows:

Figure 1 to Family Orobanchaceae: *Agalinis navasotensis* (Navasota false foxglove) paragraph (5)

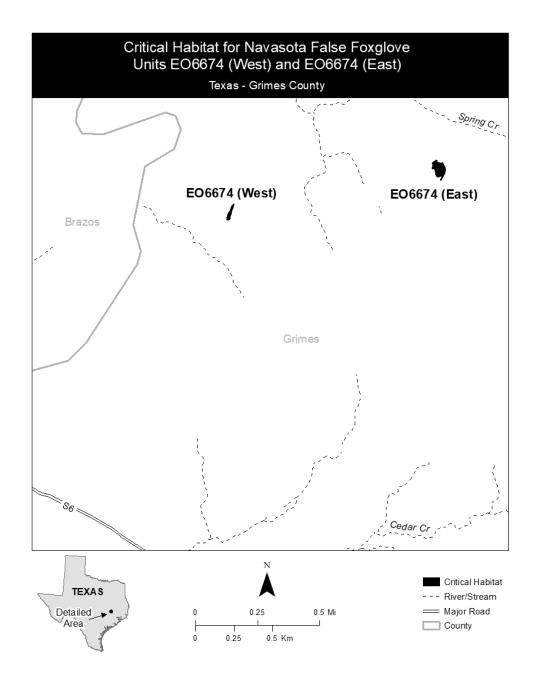


(6) Units EO 6674 (East) and EO 6674 (West); Grimes County, Texas.

- (i) Unit EO 6674 (East) consists of approximately 0.8 acres (ac) (0.3 hectares (ha)) on private land located east of Navasota, in central-west Grimes County, Texas.

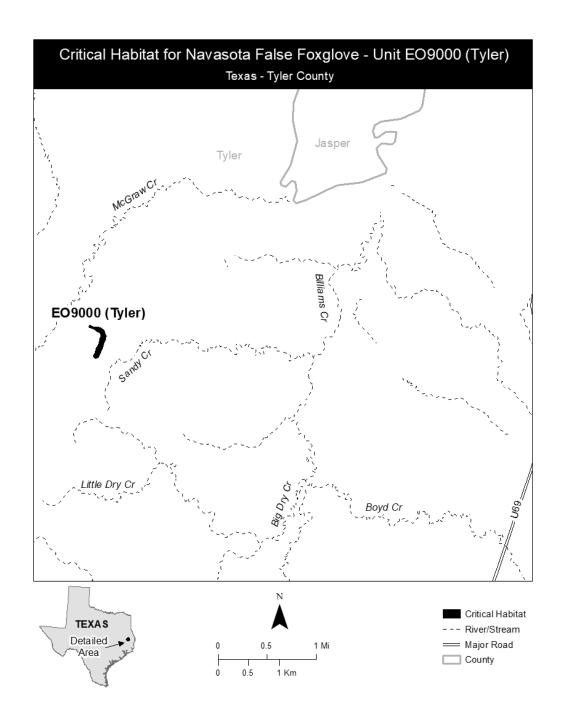
 Unit EO 6674 (East) is along a well-drained ridge line that extends down to Farm to Market 3090. The Unit EO 6674 (East) right-of-way is owned by the Texas Department of Transportation.
- (ii) Unit EO 6674 (West) consists of approximately 0.5 ac (0.2 ha) on private land located east of Navasota, in central-west Grimes County, Texas. This unit is just off Country Road 403. Unit EO 6674 (West) is a fenced area for cattle and extends along a shallow, well-drained area along the side of a grazing allotment.
 - (iii) Map of Units EO 6674 (East) and EO 6674 (West) follows:

Figure 2 to Family Orobanchaceae: *Agalinis navasotensis* (Navasota false foxglove) paragraph (6)(iii)



- (7) Unit EO 9000 (Tyler); Tyler County, Texas.
- (i) Unit EO 9000 (Tyler) consists of approximately 0.6 ac (0.2 ha) of private land northwest of Colmesneil, in northern Tyler County, Texas. This unit is located along the roadside of County Road 2845. Unit EO 9000 (Tyler) has previously been harvested for timber.
 - (ii) Map of Unit EO 9000 (Tyler) follows:

Figure 3 to Family Orobanchaceae: *Agalinis navasotensis* (Navasota false foxglove) paragraph (7)(ii)



* * * * *

Martha Williams,

Director, U.S. Fish and Wildlife Service.

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